

- **What is claimed:**

1. A method of producing a precursor material suitable for the production of mechanical objects by a forming process, comprising the steps of

5 introducing natural, relatively hard, solid vegetable material consisting substantially of cellulose;

combining starch;

adding a binding agent to produce a first mixture;

10 drying said first mixture; and

milling said dried mixture to produce a precursor powder.

2. A method according to claim 1, wherein said first mixture is dried for between 20 to 60 minutes.

15

3. A method according to claim 2, wherein said first mixture is dried at a temperature of between 60 to 80 degrees Celsius.

4. A method according to claim 1, wherein the fineness of said precursor powder varies depending upon the nature of the mechanical object.

20

5. A method according to claim 1, wherein said binding agent is

produced by a process of polymerisation of initial components.

6. A method according to claim 5, wherein an initial component is a lipid.

5

7. A method according to claim 6, wherein said polymerisation is encouraged by the introduction of oxalic acid catalyst.

10

8. A method according to claim 1, wherein precursor material is formed into a mechanical object by the application of heat and pressure.

15

9. A method according to claim 8, wherein the application of said heat and pressure is performed as a two stage procedure with a breathing period between a first application of heat and pressure and a second application of heat and pressure.

20

10. A first mixture suitable for the production of mechanical objects, consisting of:

solid material derived from a vegetable source of a substantially solid

consistency;

starch; and

a binding agent.

25

11. A first mixture according to claim **10**, wherein said binding agent includes a lipid compound.

12. A first mixture according to claim **11**, wherein the proportions
5 of said components are:

20 to 95 per cent of said vegetable material;

0.1 to 2 per cent of said starch; and

0.1 to 3 per cent of said lipid compound.

10 **13.** A first mixture according to claim **12**, also including at least one starch derivative, and/or at least one synthetic resin and/or a mixture of high molecular weight proteins.

14. A first mixture according to claim **10**, wherein said solid
15 vegetable material is derived from husks, straw, food waste, starch or sawdust.

15. A first mixture according to claim **10**, wherein said starch is agricultural starch.

20

16. A first mixture according to claim **11**, wherein said lipid compound is produced by a process of polymerisation.

26

17. A precursor material derived from said first mixture produced according to claim **10** by a process of drying and milling.

18. A mechanical object derived from said precursor material
5 produced according to claim **17** by a process involving the application of heat and pressure.